

Title (en)
SIMPLIFIED LIFT MECHANISM FOR A PACKAGING MACHINE

Title (de)
VEREINFACHTER HEBEMECHANISMUS FÜR EINE VERPACKUNGSMASCHINE

Title (fr)
MÉCANISME DE LEVAGE SIMPLIFIÉ POUR MACHINE D'EMBALLAGE

Publication
EP 3502513 A1 20190626 (EN)

Application
EP 18189053 A 20180814

Priority

- US 201816102116 A 20180813
- US 201762545025 P 20170814

Abstract (en)
A lift mechanism for simplifying the raising and lowering of a machine component has a base and a frame structure. The lift mechanism may include a lift arrangement interposed between the base and the frame structure that allows for the raising and lowering of the frame structure about a single lift point. The lift mechanism may also include various shafts, drive members, links, and arms, which in combination translate rotational movement of a motor into linear vertical motion. For instance, a drive link and an arm may be rotatably attached to one another, as well as a drive shaft and a second shaft. Additionally, a drive member may be associated with the motor. In operation, the drive member may be rotated by the motor, and a drive belt transmits rotation of the drive member to the drive shaft, the second shaft, the drive link, and the arm.

IPC 8 full level
F16H 21/44 (2006.01)

CPC (source: EP US)
B65B 31/02 (2013.01 - EP US); **B65B 65/00** (2013.01 - EP US); **B65B 65/02** (2013.01 - EP US); **B65B 65/04** (2013.01 - EP US); **B66F 7/06** (2013.01 - US); **B66F 11/04** (2013.01 - US); **F16H 21/44** (2013.01 - EP US); **B65B 9/04** (2013.01 - EP); **B65B 51/14** (2013.01 - EP US)

Citation (applicant)
US 7934362 B2 20110503 - BUCHKO RAYMOND G [US], et al

Citation (search report)

- [XI] EP 2218575 A1 20100818 - MULTIVAC HAGGENMUELLER GMBH [DE]
- [XA] US 2003042862 A1 20030306 - O'CONNOR KEVIN N [US], et al
- [XA] US 5517805 A 19960521 - EPSTEIN MOSHE [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 10961093 B2 20210330; **US 2019047834 A1 20190214**; AU 2018217222 A1 20190307; AU 2018217222 B2 20220825; BR 102018016596 A2 20190910; CA 3014169 A1 20190214; EP 3502513 A1 20190626; MX 2018009850 A 20190307; NZ 745274 A 20211029

DOCDB simple family (application)
US 201816102116 A 20180813; AU 2018217222 A 20180814; BR 102018016596 A 20180814; CA 3014169 A 20180814; EP 18189053 A 20180814; MX 2018009850 A 20180814; NZ 74527418 A 20180814